

Application Type Renewal
Facility Type Municipal
Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0036374
APS ID 1067885
Authorization ID 1403947

Applicant and Facility Information

Applicant Name	<u>Upper Uwchlan Township Municipal Authority</u>	Facility Name	<u>Eaglepointe Development Assoc STP</u>
Applicant Address	<u>140 Pottstown Pike Chester Springs, PA 19425-9516</u>	Facility Address	<u>170 Dallas Street P.O. Box 475 Atglen, PA 19310</u>
Applicant Contact	<u>Matthew Brown</u>	Facility Contact	<u>Brian Norris</u>
Applicant Phone	<u></u>	Facility Phone	<u>(610) 633-8009</u>
Client ID	<u>266603</u>	Site ID	<u>457166</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Upper Uwchlan Township</u>
Connection Status	<u>n/a</u>	County	<u>Chester</u>
Date Application Received	<u>July 18, 2022</u>	EPA Waived?	<u>No</u>
Date Application Accepted	<u></u>	If No, Reason	<u>Christina River Basin TMDL</u>
Purpose of Application	<u>Renewal.</u>		

Summary of Review

The permittee has applied for approval of renewal their permit to discharge treated sewage to unnamed tributary to Marsh Creek (HQ-TSF, MF) through Outfall 001.

The facility is serving Eagle pointe Development.

It consists of:

- Influent pump station
- Aerated flow equalization
- Extended Aeration
- Clarification
- Gravity sand filters
- Chlorination disinfection (with dichlorination)
- Ancillary systems (i.e. Aerated sludge holding/digestion; chemical feed system for phosphorous removal; flow measuring etc.).

DEP has conducted a site visit on 09/10/2021. No violations noted. DEP's Operations section has no objection for renewal application approval.

The discharge flows into UNT to Marsh Creek which is tributary of Brandywine East Branch River where EPA established 3 (three) TMDLs in the Christina River Basin, Pennsylvania, Delaware, and Maryland for: 1) Nutrients and DO under low flow conditions, 2) Nutrients and DO under High-flow conditions and 3) Bacteria and Sediment under High-Flow conditions. All nutrients, bacteria, and sediments WLA's loadings are consistent in the previous permit's renewals.

Approve	Deny	Signatures	Date
X		<i>Begay Omuralieva</i> Begay Omuralieva / Environmental Engineering Specialist	December 6, 2022
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	12/06/2022

Summary of Review

No changes in quantity and quality of the discharge, therefore all effluent limits and monitoring requirements will be proposed as previously established except annual monitoring for E.Coli and winter season for Fecal Coliform. I_{max} shall not be greater than 1000 #/ml in more than 10 % of the samples tested. Seasonal effluent limits for Fecal Coliform are based on Chapter 92a (§ 92a.47(4) & (5)) of DEP's regulations and Delaware River Basin Commission's (DRBC's) Water Quality Regulations at § 4.30.4.A. DEP's regulations govern the summer limits for fecal coliform while the winter limits are based on DRBC's regulations.

Sludge use and disposal description and location(s): Pottstown WWTP

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>.015</u>
Latitude	<u>40° 4' 21.30"</u>	Longitude	<u>-75° 41' 30.45"</u>
Quad Name	_____	Quad Code	_____
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary to Marsh Creek (HQ-TSF, MF)</u>	Stream Code	_____
NHD Com ID	<u>26089288</u>	RMI	_____
Drainage Area	_____	Yield (cfs/mi ²)	_____
Q ₇₋₁₀ Flow (cfs)	_____	Q ₇₋₁₀ Basis	_____
Elevation (ft)	_____	Slope (ft/ft)	_____
Watershed No.	<u>3-H</u>	Chapter 93 Class.	<u>HQ-TSF, MF</u>
Existing Use	_____	Existing Use Qualifier	_____
Exceptions to Use	_____	Exceptions to Criteria	_____
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	_____		
Source(s) of Impairment	_____		
TMDL Status	<u>Final</u>	Name	<u>Christina River Basin</u>
Background/Ambient Data		Data Source	
pH (SU)	_____		_____
Temperature (°F)	_____		_____
Hardness (mg/L)	_____		_____
Other:	_____		_____
Nearest Downstream Public Water Supply Intake			
PWS Waters	_____	Flow at Intake (cfs)	_____
PWS RMI	_____	Distance from Outfall (mi)	_____

Changes Since Last Permit Issuance:

Other Comments:

Compliance History

DMR Data for Outfall 001 (from October 1, 2021 to September 30, 2022)

Parameter	SEP-22	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21
Flow (MGD) Average Monthly	0.00746	0.00704	0.00604	0.00798	0.00764	0.00677	0.00708	0.0069	0.00815	0.00764	0.00797	0.00753
Flow (MGD) Daily Maximum	0.0111	0.0100	0.009	0.0119	0.0125	0.0092	0.0102	0.0096	0.0123	0.0107	0.0114	0.0139
pH (S.U.) Instantaneous Minimum	6.70	6.89	7.15	7.11	6.87	7.08	7.00	7.08	7.10	6.88	7.10	7.11
pH (S.U.) Instantaneous Maximum	7.38	7.49	7.58	7.46	7.53	7.80	7.37	7.42	7.45	7.89	7.37	7.44
DO (mg/L) Instantaneous Minimum	7.0	6.8	7.0	6.9	6.8	7.0	6.8	6.9	7.2	7.0	7.0	6.9
TRC (mg/L) Average Monthly	0.019	0.020	0.020	0.023	0.024	0.026	0.021	0.023	0.021	0.023	0.024	0.018
TRC (mg/L) Instantaneous Maximum	0.05	0.05	0.05	0.10	0.05	0.05	0.05	0.06	0.05	0.07	0.07	0.05
CBOD5 (lbs/day) Average Monthly	< 0.1	< 0.706	< 0.108	< 0.14	< 0.063	0.163	0.372	0.217	0.26	0.247	0.306	< 0.118
CBOD5 (lbs/day) Weekly Average	< 0.1	1.284	< 0.108	< 0.14	< 0.063	0.163	0.372	0.217	0.26	0.247	0.306	< 0.118
CBOD5 (mg/L) Average Monthly	< 2	< 8.7	< 2	< 2	< 2	2.8	7.2	4	3.5	3.4	4.7	< 2
CBOD5 (mg/L) Weekly Average	< 2	15.4	< 2	< 2	< 2	2.8	7.2	4	3.5	3.4	4.7	< 2
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	27.8	32	36.9	105.1	15.9	55.9	20.6	33.9	47.5	34.0	37.8	30.4
BOD5 (mg/L) Raw Sewage Influent Average Monthly	556	459	681	1500	503	957	398	625	640	468	581	514
TSS (lbs/day) Average Monthly	0.3	1.334	0.054	0.28	0.127	1.518	< 0.052	0.163	0.371	0.726	0.325	0.178

TSS (lbs/day) Raw Sewage Influent Average Monthly	17.0	20.9	13.9	36.9	15.8	13.6	5.7	9.1	14.4	20.9	17.4	12.3
TSS (lbs/day) Weekly Average	0.3	1.334	0.054	0.28	0.127	1.518	< 0.052	0.163	0.371	0.726	0.325	0.178
TSS (mg/L) Average Monthly	6	16	1	4	4	26	< 1	3	5	10	5	3
TSS (mg/L) Raw Sewage Influent Average Monthly	340	290	256	527	500	233	110	167	194	288	268	207
TSS (mg/L) Weekly Average	6	16	1	4	4	26	< 1	3	5	10	5	3
Oil and Grease (mg/L) Average Quarterly	< 5			< 5			< 5			< 5		
Fecal Coliform (No./100 ml) Geometric Mean	5	< 2	< 2	< 2	7	< 2	7	< 2	60	10	< 80	< 2
Fecal Coliform (No./100 ml) Instantaneous Maximum	5	< 2	< 2	< 2	7	< 2	7	< 2	60	10	3200	< 2
Nitrate-Nitrite (lbs/day) Average Monthly	1.446	1.135	1.605	1.969	0.872	1.892	1.003	1.339	2.561	2.54	2.277	1.184
Nitrate-Nitrite (mg/L) Average Monthly	28.9	21.6	29.6	28.1	27.5	32.4	19.4	24.7	34.5	35.0	35.0	20.0
Total Nitrogen (lbs/day) Average Monthly	1.493	1.188	1.658	2.074	0.901	1.980	1.036	< 1.366	2.654	2.605	2.347	< 1.214
Total Nitrogen (mg/L) Average Monthly	29.83	22.61	30.58	29.61	28.44	33.92	20.04	< 25.2	35.75	35.9	36.08	< 20.5
Total Nitrogen (mg/L) Instantaneous Maximum	29.83	22.61	30.58	29.61	28.44	33.92	20.04	< 25.2	35.75	35.9	36.08	< 20.5
Ammonia (lbs/day) Average Monthly	< 0.001	0.0033	0.0022	< 0.0014	< 0.0006	0.0035	< 0.001	0.0081	0.0096	0.0029	0.0091	0.0172
Ammonia (mg/L) Average Monthly	< 0.02	0.04	0.04	< 0.02	< 0.02	0.06	< 0.02	0.15	0.13	0.04	0.14	0.295
TKN (lbs/day) Average Monthly	0.047	0.053	0.053	0.106	0.03	0.089	0.033	< 0.027	0.093	0.065	0.07	< 0.03
TKN (mg/L) Average Monthly	0.93	1.01	0.98	1.51	0.94	1.52	0.64	< 0.5	1.25	0.9	1.08	< 0.5

Total Phosphorus (lbs/day)												
Average Monthly	0.006	0.008	0.005	0.013	0.009	0.029	0.006	0.029	0.017	0.017	0.014	0.019
Total Phosphorus (mg/L)												
Average Monthly	0.12	0.1	0.1	0.18	0.28	0.49	0.12	0.535	0.23	0.23	0.21	0.32

Compliance History

Effluent Violations for Outfall 001, from: November 1, 2021 To: September 30, 2022

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
CBOD5	08/31/22	Wkly Avg	15.4	mg/L	15	mg/L
Fecal Coliform	11/30/21	IMAX	3200	No./100 ml	1000	No./100 ml

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/day	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.14	XXX	0.34	1/day	Grab
CBOD5 Nov 1 - Apr 30	2.5	3.8	XXX	20	30	40	1/month	24-Hr Composite
CBOD5 May 1 - Oct 31	1.3	1.9	XXX	10	15	20	1/month	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
TSS Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
TSS	3.8	5.6	XXX	30	45	60	1/month	24-Hr Composite
Oil and Grease	XXX	XXX	XXX	15 Avg Qrtly	XXX	30	1/quarter	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab

Outfall001 , Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Nitrate-Nitrite	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Nitrogen	6.255	XXX	XXX	50	XXX	100	1/month	Calculation
Ammonia Nov 1 - Apr 30	0.189	XXX	XXX	1.5	XXX	3	1/month	24-Hr Composite
Ammonia May 1 - Oct 31	0.063	XXX	XXX	0.5	XXX	1	1/month	24-Hr Composite
TKN	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Phosphorus Nov 1 - Mar 31	0.126	XXX	XXX	1.0	XXX	2	1/month	24-Hr Composite
Total Phosphorus Apr 1 - Oct 31	0.063	XXX	XXX	0.5	XXX	1	1/month	24-Hr Composite